What is claimed is:

1. A dynamic bearing device comprising a housing, a bearing sleeve secured to an inner periphery of the housing, an axial member with an axial portion and a flange portion, a thrust member secured to one end of the housing, a radial bearing portion, which is provided between the bearing sleeve and the axial portion, and supports the axial portion in a non-contact manner in a radial direction by a dynamic pressure action of a lubricating oil that is generated in a radial bearing gap, and a thrust bearing portion, which is provided between the bearing sleeve and the thrust member, and the flange portion, and supports the flange portion in a non-contact manner in a thrust direction by a dynamic pressure action of the lubricating oil that is generated in a thrust bearing gap, wherein

the thrust member is press fitted inside an inner periphery of a press fitting portion provided at the one end of the housing, with a predetermined interference,

an outer periphery of the housing has a securing surface, which has a predetermined length in an axial direction and is secured closely to an inner periphery of a retaining member, and

the securing surface has a deformation region that deforms radially outward by a predetermined quantity during press fitting of the thrust member, and with the thrust member in a press fitted state, the securing surface adopts a substantially straight shape in the axial direction, along an entire axial length of the securing surface.

2. A dynamic bearing device according to claim 1, wherein the deformation region of the securing surface is adjacent to another end of the press fitting portion of the housing.

3. A dynamic bearing device according to claim 1, wherein prior to press fitting of the thrust member, the deformation region of the securing surface comprises a tapered shape that gradually reduces in diameter toward the one end of the housing.

4. A method of producing a dynamic bearing device comprising a housing, a bearing sleeve secured to an inner periphery of the housing, an axial member with an axial portion and a flange portion, a thrust member secured to one end of the housing, a radial bearing portion, which is provided between the bearing sleeve and the axial portion, and supports the axial portion in a non-contact manner in a radial direction by a dynamic pressure action of a lubricating oil that is generated in a radial bearing gap, and a thrust bearing portion, which is provided between the bearing sleeve and the thrust member, and the flange portion, and supports the flange portion in a non-contact manner in a thrust direction by a dynamic pressure action of the lubricating oil that is generated in a thrust bearing gap, the method comprising the steps of:

forming a press fitting portion, into which the thrust member is press fitted with a predetermined interference, at the one end of the housing;

forming a securing surface, which has a predetermined length in an axial direction and is secured closely to an inner periphery of a retaining member, on an outer periphery of the housing;

receding a deformation region of the securing surface, which deforms radially outward by a predetermined quantity during press fitting of the thrust member, radially inward relative to an other region of the securing surface, by an amount equivalent to an amount of the outward deformation thereof, and

press fitting and securing the thrust member inside an inner periphery of the press fitting portion of the housing.

5. A method of producing a dynamic bearing device according to claim 4, wherein the deformation region of the securing surface is provided adjacent to another end of the press fitting portion of the housing.

6. A method of producing a dynamic bearing device according to claim 5, wherein the

deformation region of the securing surface is formed in a tapered shape that gradually reduces in diameter toward the one end of the housing.

7. A dynamic bearing device comprising a housing, a bearing sleeve secured to an inner periphery of the housing, an axial member with an axial portion and a flange portion, a thrust member secured to an inner peripheral portion at one end of the housing, a radial bearing portion, which is provided between the bearing sleeve and the axial portion, and supports the axial portion in a non-contact manner in a radial direction by a dynamic pressure action of a lubricating oil that is generated in a radial bearing gap, and a thrust bearing portion, which is provided between the bearing sleeve and the thrust member, and the flange portion, and supports the flange portion in a non-contact manner in a thrust direction by a dynamic pressure action of the lubricating oil that is generated in a thrust bearing gap, wherein

the thrust member is press fitted and secured to the inner peripheral portion at the one end of the housing with an adhesive disposed therebetween.

8. A dynamic bearing device according to claim 7, wherein an internal taper shaped space is provided between an outer peripheral portion of the thrust member and the inner peripheral portion at the one end of the housing, for retaining the adhesive, adjacent to a press fitting portion of the thrust member inside the housing.

9. A dynamic bearing device according to claim 8, wherein the outer peripheral portion of the thrust member comprises a tapered surface for forming the internal taper shaped space.

10. A dynamic bearing device according to claim 8, wherein an external taper shaped space is also provided between the outer peripheral portion of the thrust member and the inner peripheral portion at the one end of the housing, for retaining the adhesive, adjacent to the press fitting portion of the thrust member outside the housing.

11. A dynamic bearing device according to claim 10, wherein the outer peripheral portion of the thrust member comprises a tapered surface for forming the external taper

shaped space.

12. A dynamic bearing device according to claim 10, wherein the inner peripheral portion at the one end of the housing comprises a step portion, which is positioned within the external taper shaped space, and faces toward an outside of the housing.

13. A method of producing a dynamic bearing comprising a housing, a bearing sleeve secured to an inner periphery of the housing, an axial member with an axial portion and a flange portion, a thrust member secured to an inner peripheral portion at one end of the housing, a radial bearing portion, which is provided between the bearing sleeve and the axial portion, and supports the axial portion in a non-contact manner in a radial direction by a dynamic pressure action of a lubricating oil that is generated in a radial bearing gap, and a thrust bearing portion, which is provided between the bearing sleeve and the thrust member, and the flange portion, and supports the flange portion in a non-contact manner in a thrust direction by a dynamic pressure action of the lubricating oil that is generated in a thrust bearing gap, the method comprising the steps of:

applying an adhesive to the inner peripheral portion at the one end of the housing, and press fitting the thrust member into the inner peripheral portion at the one end of the housing to which the adhesive has been applied.

14. A dynamic bearing device comprising a housing, a bearing sleeve secured to an inner peripheral surface of the housing, an axial member, and a radial bearing portion, which is provided between the bearing sleeve and the axial member, and supports the axial member in a non-contact manner in a radial direction by a dynamic pressure action of a lubricating oil that is generated in a radial bearing gap, wherein

the bearing sleeve is secured to the inner peripheral surface of the housing with an adhesive, and a concave adhesive reservoir is provided between an inner peripheral surface of the housing and an outer peripheral surface of the bearing sleeve.

15. A dynamic bearing device according to claim 14, wherein the adhesive reservoir is provided at the inner peripheral surface of the housing.

16. A dynamic bearing device according to claim 14, wherein the adhesive reservoir is of a shape that gradually reduces in size in both axial directions.

17. A dynamic bearing device comprising a housing, a bearing sleeve secured to an inner peripheral surface of the housing, an axial member with an axial portion and a flange portion, a seal portion provided at one end of the housing, a thrust portion provided at another end of the housing, a radial bearing portion, which is provided between the bearing sleeve and the axial portion, and supports the axial portion in a non-contact manner in a radial direction by a dynamic pressure action of a lubricating oil that is generated in a radial bearing gap, and a thrust bearing portion, which is provided between the bearing sleeve and the thrust portion, and the flange portion, and supports the flange portion in a non-contact manner in a thrust direction by a dynamic pressure action of the lubricating oil that is generated in a thrust bearing gap, wherein the lubricating oil is filled in an internal space within the housing, and wherein

an inside surface of the seal portion, at an inner diameter side region thereof, partially contacts with an inner diameter side region of an end surface at the one end of the bearing sleeve, and at an outer diameter side region thereof, recedes from the end surface at the one end of the bearing sleeve to form a recessed portion.

18. A dynamic bearing device according to claim 17, wherein the bearing sleeve is secured to the inner peripheral surface of the housing with an adhesive.

19. A motor comprising a rotor, a dynamic bearing device for supporting rotation of the rotor, a retaining member for retaining the dynamic bearing device, and a stator and a rotor magnet, which are provided between the rotor and the retaining member, and oppose each other across a predetermined gap provided therebetween, wherein

the dynamic bearing device comprises a housing that is retained by the retaining member, a bearing sleeve secured to an inner periphery of the housing, an axial member with an axial portion and a flange portion, which rotates together with the rotor, a thrust member secured to one end of the housing, a radial bearing portion, which is provided between the bearing sleeve and the axial portion, and supports the axial portion in a non-contact manner in a radial direction by a dynamic pressure action of a lubricating oil that is generated in a radial bearing gap, and a thrust bearing portion, which is provided between the bearing sleeve and the thrust member, and the flange portion, and supports the flange portion in a non-contact manner in a thrust direction by a dynamic pressure action of the lubricating oil that is generated in a thrust bearing gap, wherein

the thrust member is press fitted inside an inner periphery of a press fitting portion provided at the one end of the housing, with a predetermined interference,

an outer periphery of the housing has a securing surface, which has a predetermined length in an axial direction and is secured closely within an inner periphery of the retaining member,

the securing surface has a deformation region that deforms radially outward by a predetermined quantity during press fitting of the thrust member, and with the thrust member in a press fitted state, the securing surface adopts a substantially straight shape in an axial direction, along an entire axial region of the securing surface, and

the deformation region of the securing surface comprises a tapered shape, which is adjacent to another end of the press fitting portion of the housing, and which prior to press fitting of the thrust member, gradually reduces in diameter toward the one end of the housing.

20. A motor comprising a rotor, a dynamic bearing device for supporting rotation of the rotor, a retaining member for retaining the dynamic bearing device, and a stator and a rotor magnet, which are provided between the rotor and the retaining member, and oppose each

other across a predetermined gap provided therebetween, wherein

the dynamic bearing device comprises a housing that is retained by the retaining member, a bearing sleeve secured to an inner periphery of the housing, an axial member with an axial portion and a flange portion, which rotates together with the rotor, a thrust member secured to an inner peripheral portion at one end of the housing, a radial bearing portion, which is provided between the bearing sleeve and the axial portion, and supports the axial portion in a non-contact manner in a radial direction by a dynamic pressure action of a lubricating oil that is generated in a radial bearing gap, and a thrust bearing portion, which is provided between the bearing sleeve and the thrust member, and the flange portion, and supports the flange portion in a non-contact manner in a thrust direction by a dynamic pressure action of the lubricating oil that is generated in a thrust bearing gap, wherein

the thrust member is press fitted and secured to the inner peripheral portion at the one end of the housing with an adhesive disposed therebetween, and

an internal taper shaped space is provided between an outer peripheral portion of the thrust member and the inner peripheral portion at the one end of the housing, for retaining the adhesive, adjacent to a press fitting portion of the thrust member inside the housing.

21. A motor comprising a rotor, a dynamic bearing device for supporting rotation of the rotor, a retaining member for retaining the dynamic bearing device, and a stator and a rotor magnet, which are provided between the rotor and the retaining member, and oppose each other across a predetermined gap provided therebetween, wherein

the dynamic bearing device comprises a housing that is retained by the retaining member, a bearing sleeve secured to an inner periphery of the housing, an axial member that rotates together with the rotor, and a radial bearing portion, which is provided between the bearing sleeve and the axial portion, and supports the axial portion in a non-contact manner in a radial direction by a dynamic pressure action of a lubricating oil that is generated in a radial

bearing gap, wherein

the bearing sleeve is secured to the inner periphery of the housing with an adhesive,

a concave adhesive reservoir is provided between an inner peripheral surface of the housing and an outer peripheral surface of the bearing sleeve, and

the adhesive reservoir is of a shape that gradually reduces in size in both axial directions.

22. A motor comprising a rotor, a dynamic bearing device for supporting rotation of the rotor, a retaining member for retaining the dynamic bearing device, and a stator and a rotor magnet, which are provided between the rotor and the retaining member, and oppose each other across a predetermined gap provided therebetween, wherein

the dynamic bearing device comprises a housing that is retained by the retaining member, a bearing sleeve secured to an inner peripheral surface of the housing, an axial member with an axial portion and a flange portion, which rotates together with the rotor, a seal portion provided at one end of the housing, a thrust portion provided at another end of the housing, a radial bearing portion, which is provided between the bearing sleeve and the axial portion, and supports the axial portion in a non-contact manner in a radial direction by a dynamic pressure action of a lubricating oil that is generated in a radial bearing gap, and a thrust bearing portion, which is provided between the bearing sleeve and the thrust portion, and the flange portion, and supports the flange portion in a non-contact manner in a thrust direction by a dynamic pressure action of the lubricating oil that is generated in a thrust bearing gap, wherein the lubricating oil is filled in an internal space within the housing, and wherein

an inside surface of the seal portion, at an inner diameter side region thereof, partially contacts with an inner diameter side region of an end surface at the one end of the bearing sleeve, and at an outer diameter side region thereof, recedes from the end surface at the one

end of the bearing sleeve to form a recessed portion, and

the bearing sleeve is secured to an inner peripheral surface of the housing with an adhesive.